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C. H. STUBLEY.

DRIVING SIFTING APPARATUS.

No. 424,232. Patented Mar. 25, 1890.

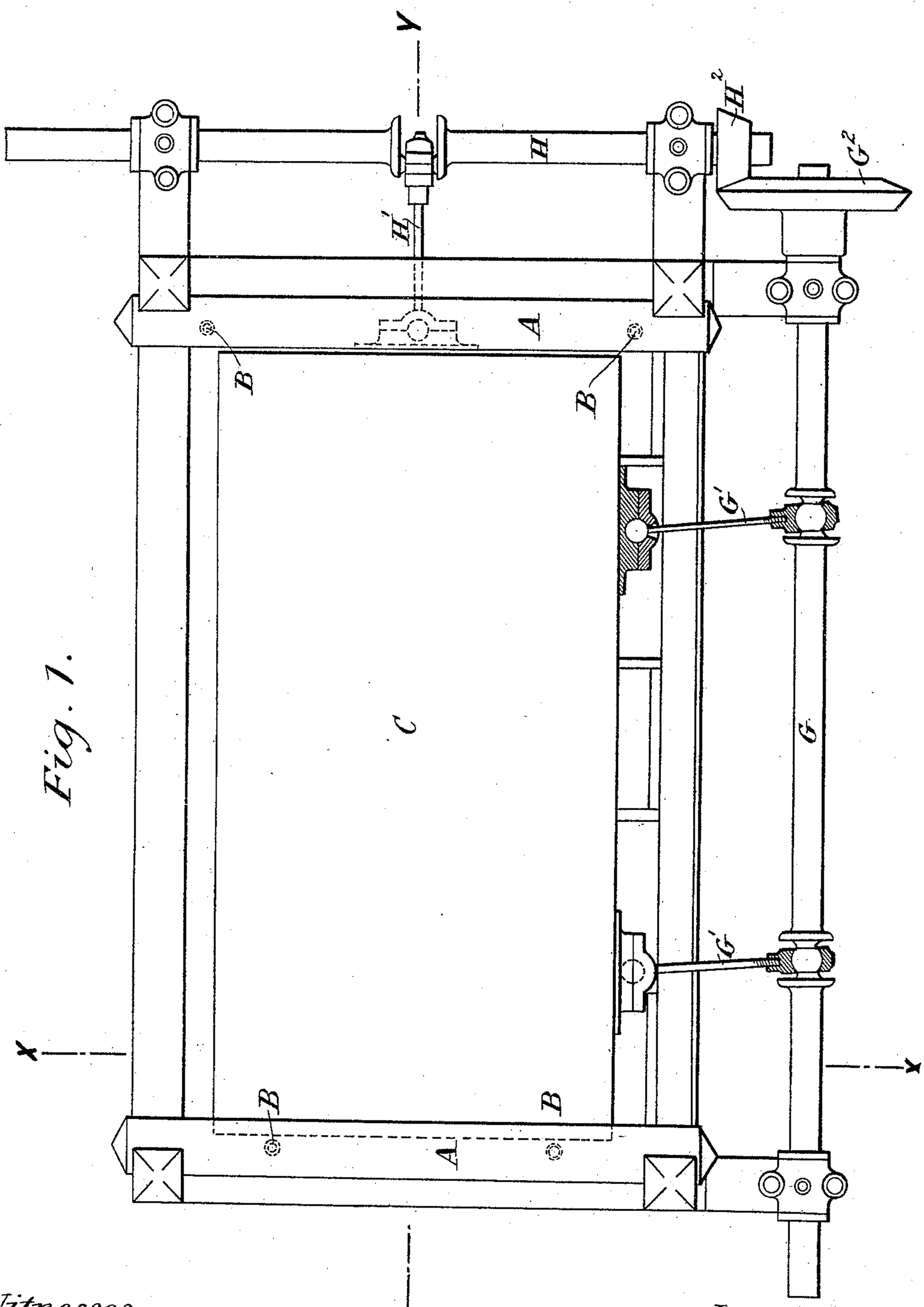

Fig. 1.

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By his Attys.
Baldwin, Dawson & Wright

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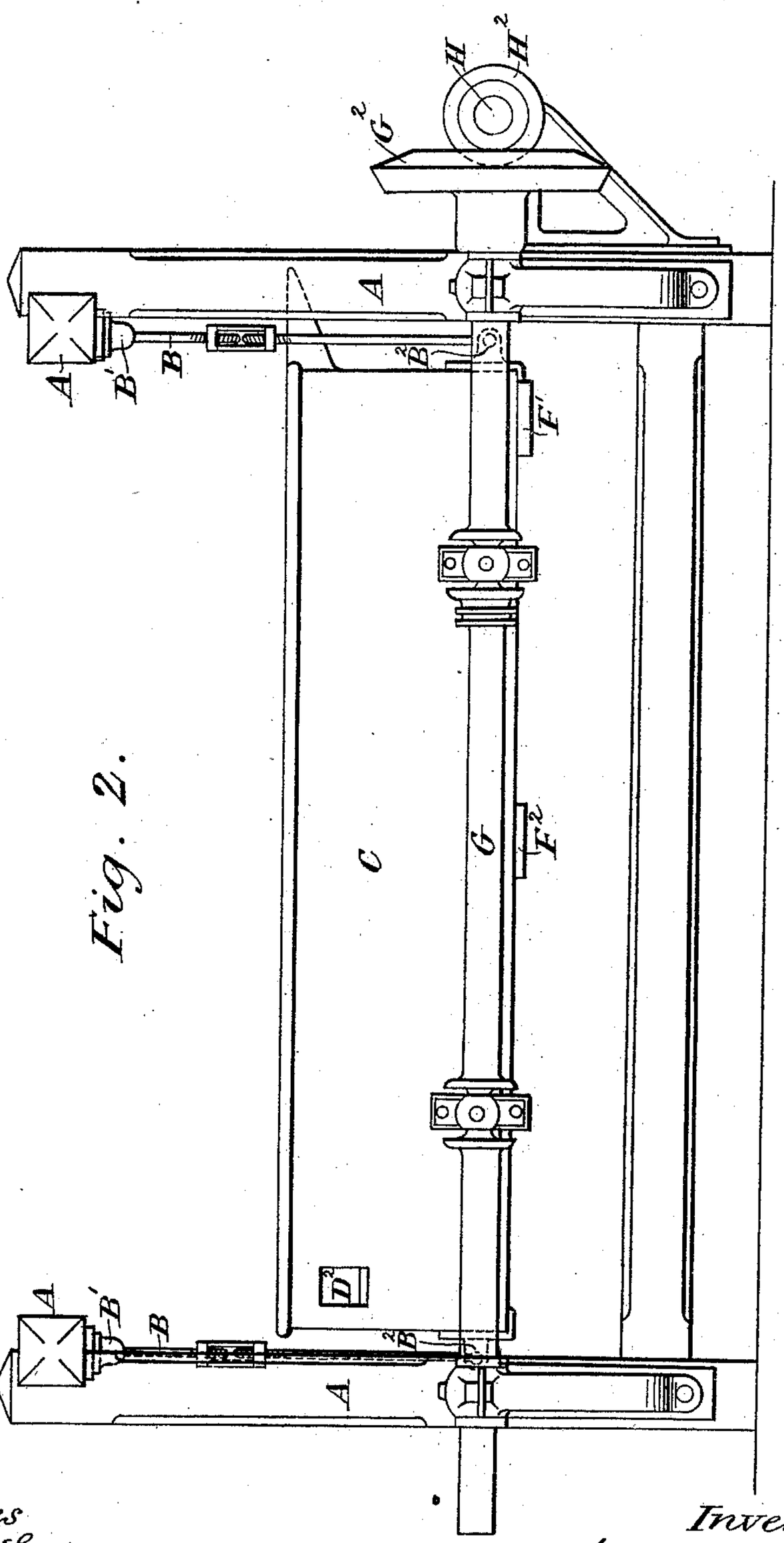

Fig. 2.

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DRIVING SIFTING APPARATUS.

No. 424,232. Patented Mar. 25, 1890.

Fig. 3a.

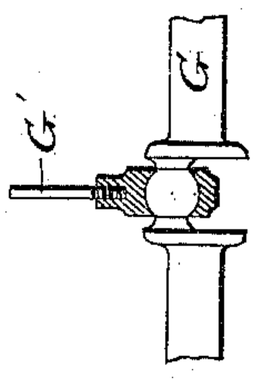
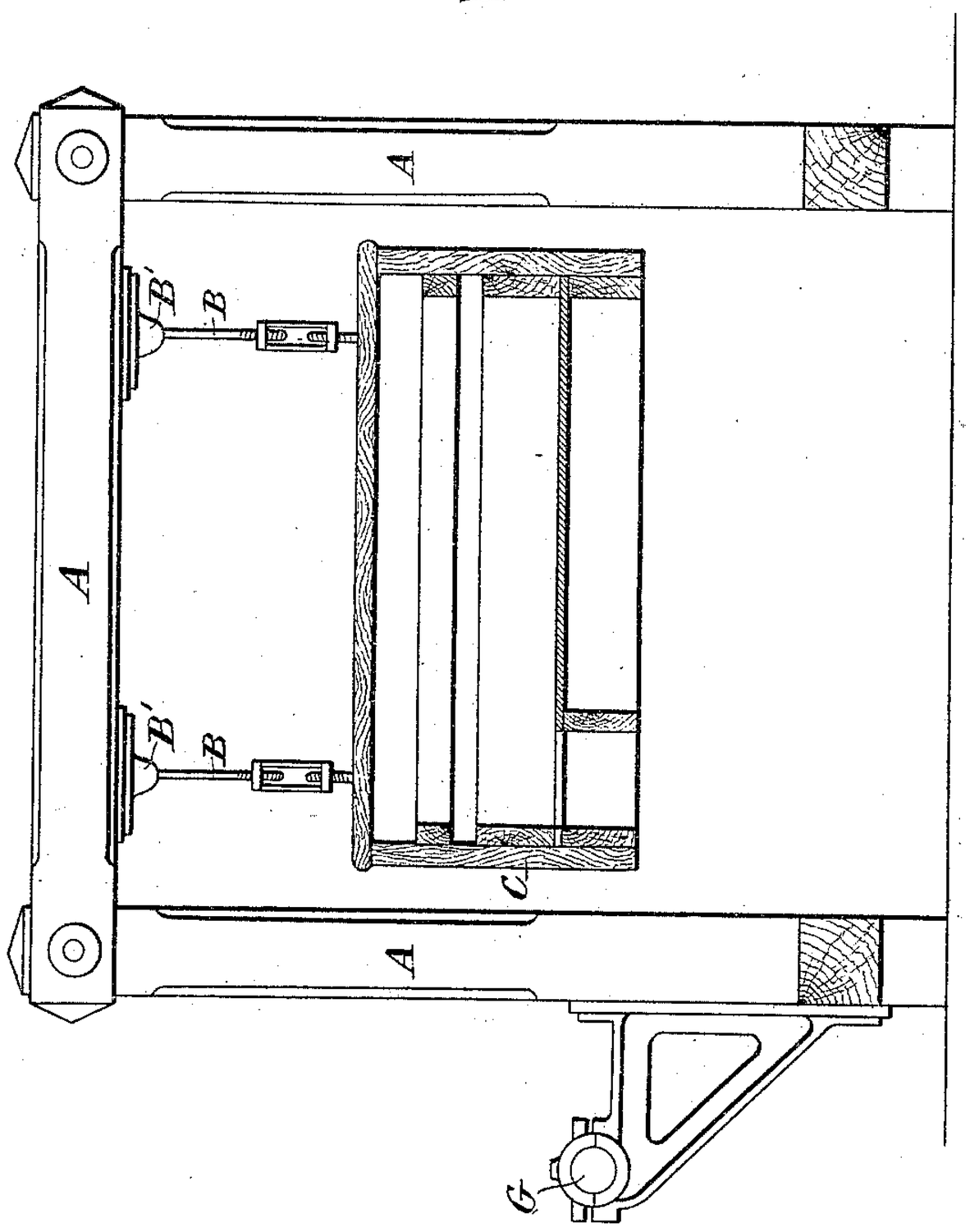


Fig. 3.



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(No Model.) 4 Sheets—Sheet 4.

C. H. STUBLEY.

DRIVING SIFTING APPARATUS.

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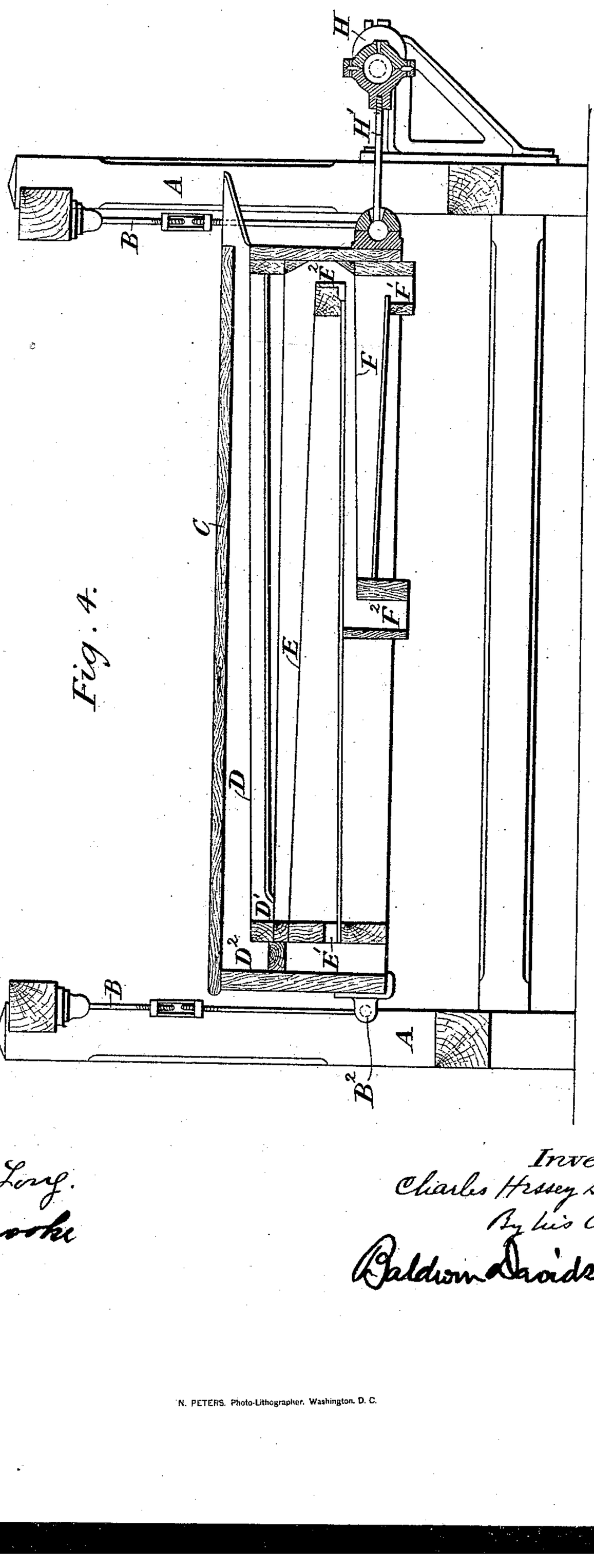

Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES HESSEY STUBLEY, OF KINGS ROLLER MILLS, KNOTTINGLEY, COUNTY OF YORK, ENGLAND.

DRIVING SIFTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 424,232, dated March 25, 1890.

Application filed October 16, 1889. Serial No. 327,214. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HESSEY STUBLEY, miller, a subject of the Queen of Great Britain, residing at Kings Roller Mills, Knottingley, in the county of York, England, have invented certain new and useful Driving Sifting Apparatus, of which the following is a specification.

Figure 1 shows a plan; Fig. 2, a side elevation; Fig. 3, a transverse vertical section on the line X X, Fig. 1; and Fig. 3ª is a detail view showing the universal-joint connection between the side shaft and one of the connecting-rods; Fig. 4, a longitudinal vertical section on the line Y Y, Fig. 1, of a flour-sifter driven according to my invention.

A is the framing, which has suspended from it four vertical rods B, whose upper ends are connected by universal joints B′ to the frame A and by universal joints B² to the framing C, which carries the sieves.

D, E, and F are the sieves. The siftings from the upper sieve pass by the opening D′ to the top of the second sieve E, while the tailings pass away by the opening or spout D². The siftings from the middle sieve E pass out by the opening E′, while the tailings pass by the opening E² to the top of the lower sieve F. The siftings from the sieve F pass out by the opening F′, while the tailings pass out by the opening F². I wish it to be understood, however, that this construction of sieve and the method of supporting it by universal joints form no part of my invention, which is applicable to many other sorts of sieves.

G is the main driving crank-shaft. Its cranks are connected to the sieve by the rods G′ G′, which have universal joints at each end, as shown. One end of the crank-shaft G carries a beveled pinion G², which gears with the beveled pinion H² at the end of the second crank-shaft H. The crank of this shaft is connected by the rod H′ to the sieve, and this rod, like the rods G′, has universal joints at each end. The shaft H might be the driving-shaft and G the driven shaft.

In the drawings all three cranks have the same throw, and the pinion G² has twice as many teeth as the pinion H²; but the cranks may have different throws, and different numbers of teeth may be used. The shafts also are shown at right angles to each other, which is the most convenient arrangement; but they may be inclined to each other at any other angle so long as they are not in a straight line with or parallel to each other. By thus varying the arrangements many different motions may be given to the sieve.

What I claim is—

1. The combination of the main frame, the sieves, the adjustable suspending-rods, the ball-and-socket joints connecting the rods to the frame and to the sieves, the horizontal side shaft G, the end shaft H, geared therewith, the rods G′, directly connecting the shaft G with the adjacent side of the sieves near each end, the universal joints at each end of the rods G′, and the rod H′, directly connecting the shaft H with the adjacent end of the sieves and having universal joints at each end, substantially as and for the purpose specified.

2. The combination of the main frame, the sieves, the suspending-rods connecting the sieves to the main frame, the horizontal side shaft G, having a crank near each end provided with socket-balls, as described, the rods G′, provided with sockets fitting said balls on the shaft G and connecting with the sieves by universal joints, the horizontal end shaft H, geared with the shaft G and provided with a crank formed with a socket-ball, as described, and the rod H′, formed with a ball-socket at one end connected with the crank on the shaft H, said rod being also connected by universal joint with the end of the sieves, substantially as and for the purpose specified.

CHARLES HESSEY STUBLEY.

Witnesses:

HERBERT FRAS. LOWE,
Notary Public, Hull.

E. H. HORSLEY,
His Clerk.